

In the Specification

Please replace the paragraph beginning at page 68, line 1, with the following rewritten paragraph:

If it is determined the relation among the four significant bits $Q_{nm}(i1, j1)$, $Q_{nm}(i2, j2)$, $Q_{nm}(i3, j3)$, and $Q_{nm}(i4, j4)$ satisfies equation (11) or (12) (YES in S28), it is determined that the image data is dishonestly used, and this block location is stored in memory 7 (step S29). If there is no match in ON/OFF state (NO in S28), then process jumps to step S30. Here, unauthorized-use location storing means is realized.

Please replace the paragraph beginning at page 85, line 13, with the following rewritten paragraph:

If it is determined that the current processing spot in the modifiable area is not at a location to be decimated (NO in S15), then the process proceeds to step S8 to adjust the odd/even property of the significant bits $Q_{nm}(x, y)$ extracted from this quantized coefficient. As has been described above, the odd/even adjustment carried out in step S8 realizes digital watermarking means and a digital watermarking function.

Please replace the paragraph beginning at page 85, line 22, with the following rewritten paragraph:

If it is determined that the current processing spot is at a location to be decimated (YES in S15), then the process jumps to step S9.

Please replace the paragraph beginning at page 87, line 12, continuing to page 88 line 5, with the following rewritten paragraph:

In this embodiment, if the current quantized coefficient in the n^{th} block BL is in the modifiable area (YES in S27), it is then determined whether the current quantized coefficient in the modifiable area is at a location to be decimated (step S35). If the current quantized coefficient is not at the location to be decimated (NO in S35), the process proceeds to step S28, and it is determined whether the odd/even property represented by either the ON state, in which the relation between natural number T and bit information of N (N is an even number) significant bits $Q_{nm}(x, y)$ ($x=0, 1, \dots, y=0, 1, \dots$) of the m^{th} bit plane of the n^{th} block BL satisfies equation (7), or the OFF state, in which the relation between natural number T and bit information of N significant bits satisfies equation (8), matches the odd/even characteristic of the hash value of the n^{th} block. Here, unauthorized use detecting means and an unauthorized use detecting function are implemented.

Please replace the paragraph beginning at page 88, line 6, with the following rewritten paragraph:

If it is determined that the current quantized coefficient in the modifiable area is a target to be decimated (YES in S35), the process jumps to step S30.

In the Drawings

The attached sheets of drawings include changes to Figs. 9, 10, and 11. These sheets, which include Figs. 9, 10, and 11, replace the original sheets including Figs. 9, 10, and 11.

Attachments: Replacement Sheets (3)